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THE RESOURCES AGENCY  
DEPT. OF CONSERVATION

DIVISION OF FORESTRY

# NEWS LETTER

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May-July 1962  
Vol. 21-Nos. 5-7





STATE OF CALIFORNIA  
THE RESOURCES AGENCY  
DEPARTMENT OF CONSERVATION

**DIVISION OF FORESTRY NEWS LETTER**

Published monthly in Sacramento for and by Division personnel. Its pages contain current facts, problems, and events relating to Forestry and to the experiences of Division personnel.

F. H. RAYMOND -

STATE FORESTER

**ADMINISTRATIVE  
—DISTRICTS—**

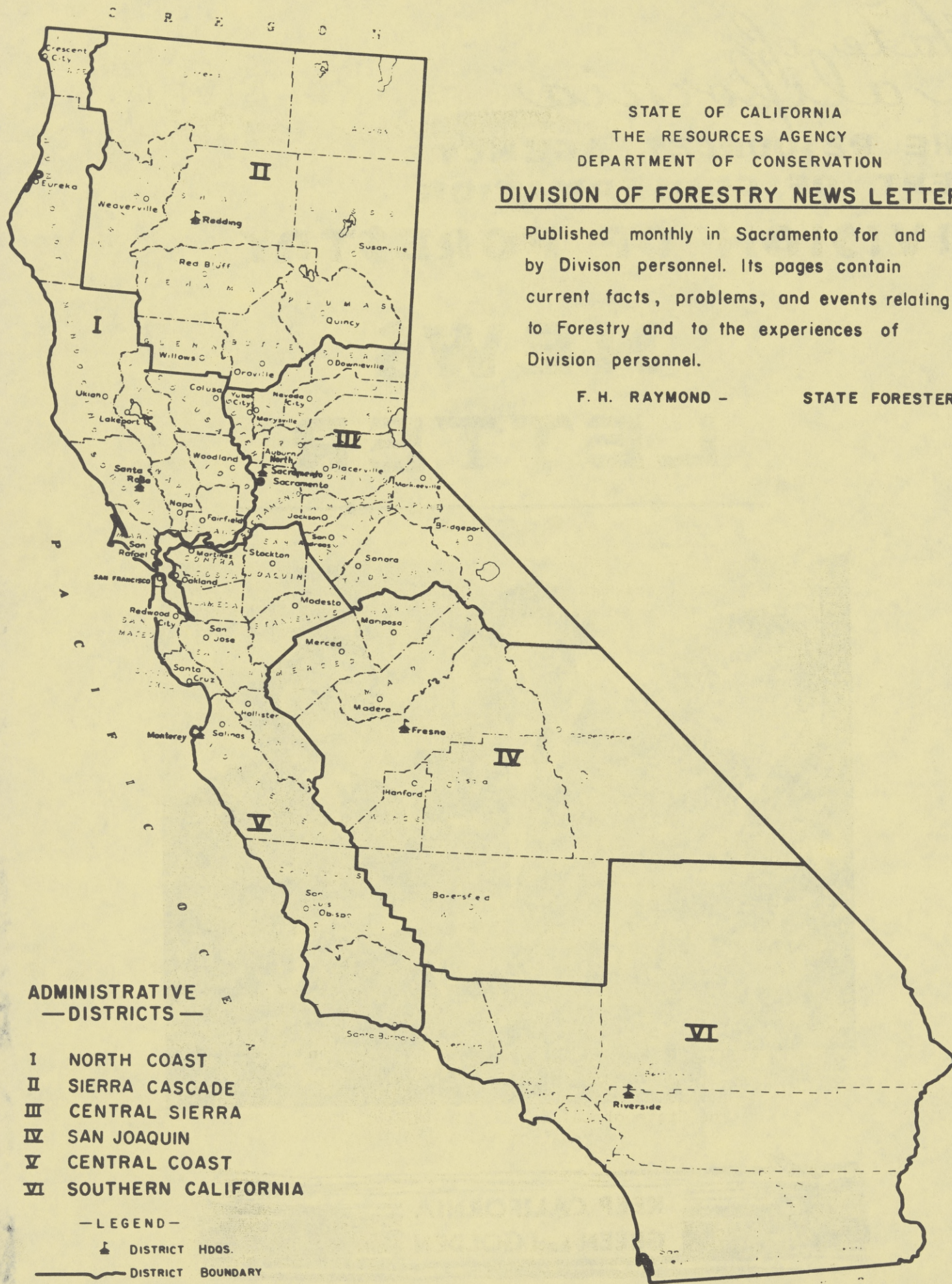
- I NORTH COAST
- II SIERRA CASCADE
- III CENTRAL SIERRA
- IV SAN JOAQUIN
- V CENTRAL COAST
- VI SOUTHERN CALIFORNIA

**—LEGEND—**



DISTRICT HDQS.

— DISTRICT BOUNDARY





#### COVER PHOTO

THE PLACE: Governor Brown's private office.

THE TIME: 1:45 P.M., May 28, 1962

THE OCCASION: Governor Brown presenting a Medal of Valor to John A. Pfeifer .

Left to right: DeWitt Nelson, Director of the Department of Conservation; John Pfeifer, Forest Firefighter Foreman, La Sierra Fire Control Station, Riverside County; Edmund S. Brown, Governor of California.

Other State officials who assisted in the presentation are: William E. Warne, Administrator, The Resources Agency of California; Robert D. Calkins, Deputy Director, Department of Conservation; Francis H. Raymond, State Forester and Chief of the Division of Forestry; Newton E. Wise, Executive Secretary, Merit Award Board; and Eugene F. Veglia, Assistant Secretary, Merit Award Board.

On June 22, 1961, Foreman John A. Pfeifer, at great risk to his own safety and life, rescued Miss Cathy Cullens, age 14, from the ocean in the vicinity of Solana Reef.

On the above date Miss Cullens, and one Bonnie Heinlein, while swimming in the ocean, were caught by a severe riptide, which carried them beyond the breakers and into deep water. Miss Heinlein was able to return to the beach, whereas Miss Cullens was carried further out. Cries for help by the two girls were unnoticed until they attracted the attention of Foreman Pfeifer. Without hesitation and thought for his personal safety, Pfeifer plunged into the dangerous surf and swam to the aid of Miss Cullens. Miss Cullens, by this time, was completely fatigued, had been pulled under water a number of times, and lapsed into unconsciousness just as Pfeifer reached her. Pfeifer returned Miss Cullens to the beach where he lay completely exhausted, while Miss Cullens was revived by a respirator after ten or fifteen minutes of application by a lifeguard organization.

The State of California takes great pride in presenting to John A. Pfeifer the Medal of Valor Pin, the highest award within its power to bestow upon one of its employees.



## MAY ACTIVITIES - SUMMARY

FIRE SEASON DECLARED: Forest fire season was declared to exist as of May 1 in Southern California, May 8 along the central coast, and on May 15 for the balance of the State.

Declaration of fire season by the State Forester allows hiring of seasonal firefighters as they are needed and requires that civil service employees assigned to fire control be available for duty 24 hours a day.

During May, 213 forest fires burned 2,404 acres and 134 structure and vehicle fires in forested areas resulted in \$330,576 damages. Number of fires and losses are about two-thirds greater than normal for this time of year.

COOPERATION IN FIRE WEATHER FORECASTING: Publication and distribution of a Wildland Fire Danger Rating Handbook by the Division of Forestry now makes it possible for all agencies in California and in the Tahoe Basin area of Nevada to use the same methods and type of equipment in determining possibility of fires starting and difficulty of controlling fires that do start.

Fire weather forecasts made by the U. S. Weather Bureau incorporating local information from almost 200 stations manned by the cooperating agencies should substantially increase the usefulness of weather forecasting as it relates to forest fire problems in the area covered.

Fire control specialists point out that even the best possible weather information available is not adequate for the needs of the forest fire agencies.

NEW FIRE RETARDENTS DEVELOPED: Search for chemical fire retardents which can be applied either by aircraft or fire truck has turned up a number of possibilities. A fertilizer, diammonium phosphato, algin, a seaweed derivative; pectate made from citrus fruit rinds; carboxymethyl cellulose manufactured from rice hulls and waste from forest or agricultural products; ammonium sulphate, another fertilizer and appulgate clay in certain combinations have shown superiority in laboratory tests to borate now widely used by the fire control agencies.

FOREST SUCCUMB TO INSECT EPIDEMIC: Thousands of pine trees in the central Sierra have succumbed to hordes of tree killing bark beetles. Preliminary reports from a group composed of foresters from public agencies and lumber companies indicate an epidemic of serious proportions has built up in the lower Sierra from El Dorado County south in trees weakened by drought over the last few years.

The California Forest Pest Control Action Council composed of representatives from the University of California and public and private agencies has appointed a committee of local public and private foresters and lumbermen to thoroughly investigate the situation and develop a cooperative control program to reduce further losses. Division of Forestry technicians will coordinate control activities on all private forest lands in the epidemic area.



## FIRE SUPPRESSION

During May, 1962, on lands that are the Division's primary responsibility, (Zones I & II), there were 213 forest fires that burned 2,404 acres and 134 non-forest fires that caused \$330,576.00 damage to structures, vehicles, improvements, etc.

For comparison purposes the five-year average for the month of May is 141 forest fires, 1,321 acres burned, 113 non-forest fires, and \$279,748.00 non-forest damage.

The State Forester officially declared a fire season to exist on May 8 in the Central Coast District and on May 15th for the other four Districts north of the Tehachapi Mountains. The Southern California fire season was declared on May 1st.

## FIRE WEATHER AND FIRE DANGER RATING

### FIRE DANGER RATING HANDBOOK

Punching and assembly of some 1,000 sets of inserts for the new Wildland Fire Danger Rating Handbook was completed. 600 sets were delivered to the Pacific Southwest Forest and Range Experiment Station for U. S. Forest Service use. About 400 Handbooks were assembled and sent to the Division's field units. Each book is assigned to a definite location.

The Fire Weather and the Fire Danger Coordinators completed collection, reproduction, punching and assembly of the five California Fire Weather Office operating plans. The various plans were forwarded to the field for insertion in Part IV of the Wildland Fire Danger Rating Handbook according to area of assignment. Assistance was also given to the various Districts and Weather Bureau in coordinating forecasting operations between weather offices and Districts. A one-day meeting was attended at Santa Rosa with the Sacramento Fire Weather Forecaster and North Coast District staff for this purpose.

### STATE OF NEVADA

Continuing in line with the original request by the State Forester of Nevada for assistance in Fire Danger Rating the two coordinators spent three days in Nevada on this project. Three station sites were selected and instrument location staked out. Some installation work was done on the site and in the shelters. A conference was held with the Reno Weather Bureau to discuss and explain the operation of the Wildland Fire Danger Rating System in Nevada. Later in the month the Fire Danger Rating Coordinator returned for a progress check and technical inspection of the weather station installations. At this time a full one-day training session was held for the Nevada people. The operation of the Wildland Fire Danger Rating System was covered in great detail. Major emphasis was on weather observations, data recording, and Danger Index computations.

During these trips the Truckee Ranger Station of the Tahoe National Forest and the Myers Ranger Station of the El Dorado National Forest were visited. The operations of the State of Nevada in Fire Danger Rating work in the Tahoe Basin area were explained, particularly with reference to the need for cooperative exchange of information.



## U. S. FOREST SERVICE

At the request of the Pacific Southwest Forest and Range Experiment Station, the two coordinators undertook a weather station inspection assignment of the Truckee District of the Tahoe National Forest during the first trip to Nevada. An anemometer relocation at Truckee was inspected as was a new station site at Boca reservoir. The existing station location at Tahoe Camp (William Kent Campground) was checked for adequate exposures. Recommendations and comments on all three sites were written up and forwarded to the Experiment Station for their use and decisions.

### SAN MATEO WEATHER STATION SITES

The two coordinators spent one day in San Mateo County. Instrument locations for Allen Peak Lookout and Central Station were selected and staked out. Some installation of instruments in the weather shelters were performed. Procedures and methods of field installation of instruments were explained in detail.

### RADAR AND THUNDERSTORM TRACKING

A meeting was attended with the radar staff of the Sacramento Weather Bureau to develop operational plans for the forthcoming season. Highlights of the meeting included discussion of inclusion of the State of Nevada in the reporting program, streamlining and speeding up reporting of data from the radar scope, and special study or interest areas. Operational procedures are to be written up and sent to the field shortly.

### WIND COUNTER REPAIR PROJECT

The Fire Danger Rating Coordinator spent a day at the Beaver Creek Conservation Camp demonstrating the methods of checking and repair of the anemometer wind counters. The counters are simple electronic tally registers designed to sample the wind movement over periods of several hours. Readings thus obtained are used in computing Danger Indexes. Originally the repair program for these instruments (eventually there will be about 150 in field use) was done in the Fire Control Office. Increased administrative workload connected with the expanding Fire Danger Rating program caused a long delay in accomplishing the repairs. The Beaver Creek Camp is undertaking the continuing program of repair of faulty instruments in an effort to speed up their return to the field. Currently, a lot of 40 new counters is also to be completely checked over before issuance to the field.

### FIRE CONTROL OFFICE WEATHER SERVICES

Weather teletype service in the Fire Control Office was resumed on May 1st. The Fire Weather Coordinator began a program of weather data collection for summer forecast studies.

The first ten days of the month were marked by near normal temperatures over the State except in the southeastern portions where normals were exceeded. The latter two-thirds of the month showed temperatures to be on the cool side. The third week of the month was particularly cool with departures from normal of over ten degrees at several points. While spotty precipitation occurred occasionally throughout the month, in all areas of the State, the principal amounts were in the Sierra and along the North Coast. One of the



outstanding weather occurrences was around the middle of the month when the freezing level dropped to 4,000 feet or lower, over most of the State with snow flurries on even the southern mountains.

#### FOREST FIRE RESEARCH

The month of May was used primarily by the Sacramento Office fire research staff in extending research results to field operations. A talk on "Progress in Forest Fire Research" was presented to the northern section of the Central Sierra Forest Fire Conference held at Tahoe City. The following week a session on "New Fire Retardants" was presented to the Northern California Forest Fire Conference held at Richardson Springs. The fire research staff also participated in a panel discussion of forest fire retardants at the Interagency Fire Control meeting held in Medford, Oregon. This latter meeting was attended by fire control people from the various governmental and private firefighting organizations in southern Oregon and northern California.

A full week was spent in training 22 crews in District VI in the use of viscous water and algin gel. Information was also given about recent experiments with long-term fire retardants to be used from air tankers.

Several planning sessions were held with the Forest Service and the Experiment Station concerning the fire retardant tests to be held in Tehama County sometime in June. This project will compare the fire retarding qualities of algin diammonium phosphate, CMC-Diammonium phosphate and Pectin Diammonium phosphate, Firetrol, (a mixture of attapulgitic clay and ammonium sulphate) and algin gel. The tests will be conducted near the Plum Creek Conservation Camp in plots consisting of buckbrush and scrub oak standing 6 to 8 feet high. The site has already been prepared by inmates from the Plum Creek Conservation Camp. These preparations include a 100-foot firebreak through the center of the test areas.

#### STATE FORESTS

Sale of 2.9 million board feet of timber from Mountain Home State Forest in Tulare County was selected by bid May 15. Revenue expected is \$42,675. The area will be harvested carefully to promote tree growth, save Sierra redwoods, and to protect recreational values.

#### PEST CONTROL

The California Forest Pest Control Action Council (composed of public and private agencies) has decided to move ahead with a survey to determine the extent and kind of damage suffered by forests from animals. A committee of the Council met in Sonora May 18 to outline plans for the survey which will commence in June in the north coast redwood area. Foresters have long been concerned with damage to trees caused by mice, squirrels, rabbits, porcupines, bear, deer, and elk. The survey is needed to find how much loss is sustained in order to work out programs to reduce damage to an acceptable level.

A serious infestation by bark beetles in the lower Sierra from El Dorado County south was inspected by the Pest Council during a field trip May 1 and 2. Thousands of pine trees weakened by drought conditions of the last few years have succumbed to insects. A committee of local public and



private foresters and lumbermen was appointed to investigate the situation further and to develop a cooperative program of control by salvage logging and chemical treatment between landowners and public forestry agencies.

A study on the dynamics of insect populations--how they fluctuate and the factors that cause these changes--was initiated in El Dorado County in May by the University of California assisted by a lumber company, the California Division of Forestry, and the U. S. Forest Service. Aerial pictures and ground surveys were made of University of California's Blodgett Forest and surrounding lands to record insect conditions. This inventory will be repeated for a few years and related to factors that cause insect attacks.

#### PUBLIC RELATIONS

How trees grow and die was the subject of a publication issued by the California Division of Forestry in May. This report is based on a study of the mortality and growth of trees on Boggs Mountain State Forest in Lake County. It showed that net growth per acre per year for trees varied from 228 board feet to 731 board feet depending on site conditions and number of trees.

The successful planting of 100,000 acres of trees by the U. S. Forest Service was celebrated on May 15 at Placerville. Regional Forester Charles Connaughton planted a tree as a symbol to this achievement. Members of the press, radio, and TV were given tours of local plantations and good coverage was obtained in local and Bay Area papers and stations.

#### ENGINEERING

On May 3 Petersen met with Stan Smyth of Architecture and presented him a list of needed construction that could be started within 90 days if financing was available from Federal or State sources. This is a standby program to aid the economy if and when necessary in the depressed counties of the State.

Reinecker presented a program to District IV relating to capital outlay construction, 5-year capital outlay program, with further emphasis on the Divisions' need for more thorough long-range planning and methods whereby to do this.

The 1961 Conservation Camp Program Report was printed and is being prepared for distribution.

On May 28 the Public Works Board approved the acquisition of Mt. Woodson in the amount of \$26,600, the acquisition of the Iron Mine Conservation Camp and technical amendments to several other acquisitions. They also approved the construction drawings and money for Cambria Forest Fire Station, Irvine Lake Forest Fire Station and Hilton Forest Fire Station.

#### JUNE ACTIVITIES - SUMMARY

FOREST FIRE INCIDENCE ABOVE AVERAGE: Both forest fires and non-forest fires in forested areas increased markedly during the first six months of 1962 over the averages reported for the same period during the last five years.



Records of the Department's Division of Forestry show 1,771 fires through June 30 as compared with a five-year average of 1,282. Acreages burned in forest fires this year is reported at 15,918. The five-year average for a similar period is 20,911. Total damages to structures, vehicles, and natural resources in the forested areas are reported at \$2,144,241. Averages over the last five years have been \$1,801,151.

The increase in incidence is attributed to an abundance of light fuels and recent drying winds.

BETTER FIRE RETARDING CHEMICALS FOUND: Field tests of recently developed fire retarding chemicals proved their superiority over water and borate as long-term fire retardents. Most promising were diammonium phosphate solutions thickened with various viscosity agents and ammonium sulphate-attapulgitic clay formulations.

At least 40 Division of Forestry fire trucks will be modified this season to take advantage of the increased fire-fighting effectiveness of the new chemicals. Because the new fire retardents are extremely corrosive regular fire-fighting aircraft will require major modifications before the new retardents can be used in them. For the balance of the fire season only one previously "corrosion proofed" air tanker will be able to use the new retardents.

FOREST INSECT EPIDEMIC LOSSES MOUNT: An epidemic of pine beetles currently raging in the Sierra Nevada mountains has caused timber losses in excess of \$10 million according to reports presented at meetings of Federal, State, and private foresters. The present limits of the epidemic are the American River on the north and the Tehachapi mountains on the south. Most seriously hit areas extend from lower fringes of the pine forests to about 5,000 feet elevation.

Total area involved covers about a million acres. Some 1½ million trees containing enough lumber for 100,000 homes have already been lost.

Recommendations for control of this epidemic developed by specialists from the Department's Division of Forestry working with experts from private industry and the Federal government include: encouraging timber owners to harvest infested trees, cooperation between owners and public agencies on control projects, and a program to inform the public and landowners of the problem.

TIMBER SOLD FROM STATE FOREST: Scott Lumber Company, Inc., of Burney in Shasta County was awarded a timber sale on 385 acres of Latour State Forest in Shasta County. Some three million board feet of ripe and over-ripe will be cut and removed with an estimated return to the State of \$39,149. Other advantages of the sale will be improved forest growth and improved access for forest protection and development.

#### FIRE SUPPRESSION

The continued drying of fuels and ground surface, along with the rise in temperatures toward the warmer summer type, has caused a steady rise in fire activity during the month of June.



As a mid-year fire report, the following table summarizes and compares the number of fires, the acreage burned, and the damage in all zones for the period January 1 to June 30, 1962, with that of a five-year average of comparable periods.

FOREST FIRE STATISTICS  
January 1, 1962 - June 30, 1962

	<u>INCIDENCE</u>		<u>ACRES BURNED</u>		<u>DAMAGE</u>	
	1962	5-year average	1962	5-year average	1962	5-year average
Forest Fires/State Responsibility Areas	959	713	15,918	20,911	\$318,130	\$180,634
Non-Forest Fires/State Responsibility Area	812	569			1,826,111	1,620,517
Agricultural and Structural Fires Zones III	3,112	2,890	4,837	4,254	2,568,268	3,051,467
<b>TOTAL</b>	<b>4,883</b>	<b>4,172</b>	<b>20,755</b>	<b>25,165</b>	<b>\$4,712,509</b>	<b>\$4,852,618</b>

5-year average: 1957 through 1961

FIRE WEATHER

June was relatively normal from the weather standpoint. There was only a short period of thunderstorm activity in areas other than the high Sierra. This occurred during the latter half of the second week and was mostly in the northern portion of the State.

Temperatures were near normal for most of the month, throughout most of the State. The third week experienced the warmest weather of the month when temperatures exceeded the mean for three or four days over most of the State.

FOREST FIRE RESEARCH

The California Air Attack Coordinating Committee met at the Experiment Station in Berkeley early in June to consider primarily the corrosion problems of the potential long-term fire retardents, diammonium phosphate and ammonium sulfate. The committee decided to test one or both of these chemicals from at least one N3N air tanker during the 1962 fire season. The actual material to be tested would depend upon the results of the Plum Creek fire retardent tests.

The Experiment Station announced that it would also be testing viscous diammonium phosphaim in grass along roadsides in cooperation with the California Division of Highways. Highways is interested in finding a chemical which they can apply easily to roadside vegetation with an effect which would last through light summer rains.



The Arcadia Equipment Development Center stated that among many other things they would be working with the application of fire retardent chemicals from radio controlled missiles. The Forest Service has contracted to build ten of the Drone missiles for experimental purposes.

During the week of June 18 the California Air Attack Coordinating Committee conducted a series of tests of several new forest fire retardents. The tests were made in brush plots located near the Plum Creek Conservation Camp in Tehama County of District II. The highly cooperative testing program involved the combined efforts of personnel from the District II headquarters, the Tehama Ranger Unit, the Plum Creek Conservation Camp, the Lassen National Forest, Region 5 Headquarters of the Forest Service, the Pacific Southwest Forest and Range Experiment Station, the Arcadia Equipment Development Center, the Los Angeles Fire Department, and the U. S. Weather Bureau. Among the many interested people were representatives of the Forest Service's Northern Fire Laboratory in Missoula, Montana, the Pacific Southwest Forest and Range Experiment Station in Portland, Oregon, and the Oregon State Department of Forestry. Industry representatives were present from the Monsanto Chemical Company, Kelco Company, Sunkist, Ventura Lemon Growers Association, Hercules Power Company, Arizona Agrochemical Corporation, and the U. S. Borax Chemical Company.

The long-term fire retardents tested included diammonium phosphate which had been thickened by several viscosity agents: algin CMC, Sunkist pectate and Ventura Lemon Growers Pectate, Firetrol, a formulation of attapulgite clay and ammonium sulfate, was also tested. Brush plots treated with borate were burned to provide a comparison for the above long-term fire retardents.

Algin gel was tested as a short-term fire retardent with drying periods of one and three hours. The long-term fire retardents were tested after drying periods of 3 and 24 hours.

While the results of the tests have not yet been fully analyzed, it was evident that the viscous DAPS and the Firetrol all showed a considerable promise as long-term fire retardents and, in fact, appeared to be superior to borate in the Plum Creek tests. One or more of these materials will be given operational testing on forest fires from at least one air tanker during the 1962 fire season. If corrosion problems can be solved, broader use will undoubtedly be made of the materials which have many advantages over borate.

The Sacramento staff assisted in giving training in the use of the algin gel backpack unit to the Corona and Beaumont fire crews in Riverside County. During the 1962 fire season the Division will have 8 of these algin gel backpack units in operation. They will be located with the viscous water crews at Garberville, Sterling City, El Dorado, Cathay, Paso Robles, Flynn Springs, Corona, and Beaumont.

#### FIRE DANGER RATING

During June, the Fire Danger and Fire Weather Coordinators completed, in two stages, an inspection of all of the Fire Danger Rating weather stations in District IV. They also visited a number of locations proposed by the Ranger Units as supplementary weather observing sites that might gather data to be incorporated into the Danger Rating System.



On the 5th the Fire Control Deputy and two coordinators attended a conference in Reno that was called for the purpose of discussing the California and the Intermountain Fire Danger Rating Systems and their coordination in areas where the two systems adjoin.

Tests were made to determine that the surplus facsimile transmitters and receivers recently obtained are compatible. It was learned that useable copy can be received.

The Western Fire Weather Coordinator from the U. S. Weather Bureau, Missoula, Montana, was a visitor in the Fire Control Office during the month. Various matters relating to the implementation of the expanded Fire Weather Forecasting plan were discussed.

#### WATERSHED MANAGEMENT

California Division of Forestry personnel participated in two preliminary meetings with the U. S. Forest Service relative to reviewing and revising forest and fire protection studies for the Oroville Reservoir Watershed.

A preliminary review and comments were prepared and submitted on the East Side Division, Central Valley Project prepared by the U. S. Bureau of Reclamation.

#### FIRE CONTROL COOPERATION

In Lake County the California Division of Highways has been intensifying their efforts at fire proofing along State highway rights-of-way with approximately 85% of the highway so treated.

Also, in Lake County the county dumps have been fireproofed in cooperation with the Division of Forestry and the county. In addition, three private dumps have been closed because of considerable fire control problems during the past few years.

#### STATE-FEDERAL FIRE PROTECTION COOPERATION

The "Green Book" for fiscal year 1962-63 was prepared and distributed to all Division of Forestry districts and the U. S. Forest Service. There were no increases in level of service over fiscal year 1961-62; however, there were several changes in crew locations.

On the Lassen National Forest the Pat Morris No. 2 crew was changed to the Bogard Station.

On the San Bernardino National Forest the Arrowhead patrolman was changed to Running Springs, the No. 1 crew at Barton Flat was changed to Converse and the No. 1 crew at Idyllwild was changed to Keenwild.

Representatives of the Stanislaus and Sierra National Forests and the Mariposa Ranger Unit met to discuss the mutual aid agreements and cooperative fire control operations.



## CIVIL DEFENSE

The Mendocino Ranger Unit hosted and conducted a Civil Defense meeting at Howard Forest for all fire services in Mendocino County. Fire control problems and mutual aid assistance was the topic.

## FIRE CONTROL GENERAL

A representative from the Sacramento Fire Control office attended the meeting of the Southern California District Dispatchers in Perris on June 8.

## FIRE PREVENTION

Continuing the program to reduce the incidence of railroad fires and damages resulting from them, meetings were arranged and held in three districts with representatives of the major railroads and personnel of the protection agencies. Another such meeting will be held in District I on July 16.

Southern Pacific, A.T. and S.F., Western Pacific, and Sacramento Northern railroads were represented at the meetings in Districts II, III, and IV. Division and U. S. Forest Service personnel presented the fire problems.

During the past several years considerable progress has been made in reducing the number of railroad fires and the acreage burned. From discussions at these meetings it is evident that the railroads want to do everything practical to prevent fires. They also will continue their program to provide better access to their rights-of-way for fire control.

After the development of an internal spark arrester for diesel locomotives and subsequent installation on most of the locomotives, a sharp decline in the number of fires from sparks was noted. There has, however, been a noticeable increase in fires from that cause this year. Contacts have been made with research, development, and mechanical personnel of the companies and a concerted effort is being made by them to isolate the cause.

## FIRE PREVENTION PLAN

The proposed Fire Prevention Plan for the Division was given public hearings on three occasions during the month. The first presentation was made in Santa Barbara before the Range Improvement Advisory Committee, the second at a regular Board of Forestry meeting in Redding, and the third before the Board in Eureka.

Interested persons commented on the proposed plan. Others were invited to submit written comments to the State Forester prior to July 4.

Final draft of the plan will be given due consideration to the suggestions of interested parties and will be presented to the State Board of Forestry for approval in August.



## STATE FORESTS

Stream protection problems were reviewed on-the-ground by headquarters and field representatives of the Division of Forestry and the Department of Fish and Game on a tour of Jackson State Forest in Mendocino County June 7-8. Measures to prevent and correct stream damage during harvesting of virgin timber were discussed and agreed upon. The group also considered stream protection in young-growth stands and a proposed 12-year study to determine effects of road construction and timber harvesting on water yield, sedimentation, and fish habitat.

Scott Lumber Company, Inc., at Burney was awarded a timber sale for some three million board feet of timber on the Latour State Forest after bids were opened in Redding on June 5. Total value of the sale is estimated at \$39,149. This sale will improve forest growth through the harvesting of ripe and over-ripe timber from 385 acres this summer and provides for the construction of timber access roads valuable for the protection and development of the Forest.

## PEST CONTROL

A catastrophic outbreak of pine beetles in the central and south Sierra Nevada was the subject of a meeting of State, federal, and private forest managers held in Sacramento June 19. About one billion board feet of timber and 1½ million trees have been lost to these insects in 1961 in this area primarily due to drought conditions that have existed since 1958. Recommendations for control of this epidemic were developed; they include encouragement of timber owners and operators to harvest infested trees, cooperative action between owners and public agencies for integrated control projects, a resurvey of the area in the fall to keep check on the epidemic, and a program to inform the public and landowners about the problem. The Board of Forestry also took official notice of the epidemic and offered to promote and support concerted suppression measures.

## FOREST PRACTICE

A thorough discussion of the history and application of the Forest Practice Act was made before the Board of Forestry in Redding on June 15 by Professor Emanuel Fritz, emeritis, School of Forestry, University of California; William Schofield, Forestry Consultant; John Callaghan, Executive of the California Forest Protective Association; and Francis H. Raymond, State Forester. Legislative changes in the Act to bring about improvement in operations of some loggers was proposed by DeWitt Nelson, Director of Department of Conservation at this meeting. In the afternoon the Board made a field trip to local forest products manufacturing plants and the next day visited timber operations, Latour State Forest, and other points of interest.

The Board in Eureka on June 18 approved an alternate plan for Humboldt Fir Inc., to clearcut 1,328 acres in the Redwood Forest District near Hoopa which provides for keeping the land productive by artificially restocking the logged area following logging by aerial seeding or hand planting as required. During the afternoon the Board toured timber operations in the Eureka area and saw lands under alternate plan being reforested by natural and artificial methods.



## SERVICE FORESTRY

The California Christmas Tree Growers Association held its annual spring meeting and field trip in the Placerville, El Dorado County area July 15-16. Division and industry foresters assisted with the program the afternoon of the 15th discussing nursery planting stock, planting techniques, and diseases and insects affecting Christmas trees. The group adopted grading standards for red fir and white fir Christmas trees. On the 16th a tour was made through the facilities of the Institute of Forest Genetics where hybrid trees having excellent Christmas tree characteristics were shown. Visits also were made to several Christmas tree plantations and natural stands of Christmas trees. About 75 members attended.

A suggested means of lightning protection for our 4-pole antenna structures was edited as received from the Division of Communications and will be forwarded to the field for incorporation at selected sites.

The site grading has been completed at the Koncti Conservation Camp in Lake County and we are now ready to let the contract for the main camp buildings.

Papers have been transmitted to us by the Department of Finance for the lease and acquisition of the Call Mountain Vault. This will be a 49-year lease with the vault to become state property upon termination of the lease.

The deed has been signed for the purchase of the Pine Grove Conservation Camp property in Amador County from Mrs. Peyton. The camp has been operating on this site under a lease basis.

## LOW INTEREST LOANS AVAILABLE FOR FOREST MANAGEMENT

Effective immediately, the USDA's Farmers Home Administration will make loans to enable eligible farmers to carry out better forestry management practices, expand their forest resources, and to convert crop land to forestry uses.

Purpose for which the loans will be made include funds for fencing, pest control, thinning, and fire protection, including development and improvement of fire lanes. In addition, loans will be advanced for clearing and preparing land for forestry planting, for purchasing and planting forest seed or seedlings, for farm land that is or will be forestland, and for refinancing debts against forestland.

The loans will bear 3 percent interest and will be repayable over periods up to 40 years. Loans previously were made at 5 percent interest, and the lower rate is designed to encourage greater participation. When necessary the initial payment on the loan may be deferred for periods up to 15 years. The maximum loan under the program is \$60,000, or the value of the security provided by the individual farmer.

What impact the FHA loan program will have on the Division Service Forestry program is not yet know.





This prevention bulletin board has been installed at the Hornbrook Quarantine Station. The planning and installation of this board was done by Assistant Ranger Herman Hammack. (right) The care and maintenance of this board will be done by the Quarantine personnel under the supervision of Don Douglas, Supervisor of this station.

CAPTAIN CASIMIC BIELAWSKI  
(Below)

Many people wonder how the first tower lookout constructed by the California "Board of Forestry" came by the unusual name of Bielawski. The name was simply adopted from the

mountain top on the boundary range between Santa Cruz and Santa Clara counties which the lookout occupies.

Casimic Bielawski was born in Poland on February 27, 1815. As a Captain of Engineers in the Austrian Army in 1846 he became so incensed at the treatment of Polish peasants that he resigned and emigrated to America.

In 1853 he began a 45-year career in the U. S. General Land Office at San Francisco. Bielawski was highly respected for his engineering skill and great personal integrity during a period when land acquisition by any means was common practice. A government report of 1861 says that he conducted most of the survey made of the navigable portion of the Colorado River. He also made most of the original township surveys in the Santa Cruz mountains. In 1865 he and two others published a topographical and railroad map of the central part of California and Nevada.

Later, Bielawski was president of the Polish Society of California. He married an English woman in San Francisco. She died there in 1894 and he lived on until March 3, 1905.





THE FOLLOWING IS BY FRANK CAMERON - NOW RETIRED

It was a Clar Winters night. High in the Sierras Smokey Bear and Sparky were discussing personnel problems, with emphasis on a certain fire guard named Chris.

"Where is that Damgaard?" Smokey asked petulantly "That white man's Berdan should be around here somewheres."

Sparky smiled tolerantly. "Watt's eatin' you boss? Ain't you Phelan good? You know how them guards are Innes and out all the time. Standing around Chatten with this one or that one." He stood up and shook himself. "Skewes me a minute, boss, and I'll look around. "If'n he's around here you can Bratcher life I'll find him. I'll Mosely around a bit and Nash someone."

He stepped out of the circle of light and raised his voice, "Hey Dyer" he called "Anyone Sechrist lately?" There was no answer.

From his seat near the campfire Smokey Called, "Are you Schori's around here?"

Sparky replied, "He ain't Bennett work much tonight. Been drinkin' I guess. As a matter of fact I wouldn't be surprised if he'd come Tomblin down from a tree."

Smokey said emphatically, "No, I understand he's Dunwoody stuff. For one thing he's broke, and you can Bertsch your life you Dotta have dough to buy Old Taylor."

Sparky returned into the circle of light belligerently. "That's a lot of Hughey, chief" he fumed "I seen him Weaver around here just yesterday. And as Forssbeck as I can remember, he'll buy it when he can a Ford it."

He turned and started to look Keast and west. "My eyesight ain't as Keane as it was but I'll Hunter around again."

Under his breath, he added, "That dumb Moran, if I catch him I'll hang a Schoener on him you can Bechler life."

Smokey, clowning, called, "Voss dat you're saying? You getting Sornson?"

Sparky Custer round a few minutes and started to Neil. Spying a Scuttling beetle he whispered, "I Swanson, if'n I had as much sense as you I'd quit. As a matter of fact, I Wilson. I'm Phillips to here."

Rising, he strode down the mountainside toward home, feeling Gladish that his job had been Weldon.

LETTER FROM RRCC

"The Board of Directors of the Redwood Region Conservation Council and the Junior Logging Conference Committee wish to express to you our sincere appreciation for the outstanding cooperation rendered by members of the Division of Forestry in staging the 10th annual Junior Logging Conference.

"Each of those participating contributed greatly to the success of the conference. Special mention must be made of the material assistance



given by Joe Springer and Harry Pritchard, Assistant Ranger, Weott. These two and those assisting them were in no small way responsible for the smooth operation of the camp and the quality of the program.

"Our thanks again, Francis, for permitting the members of your organization to work with us in presenting this important event in our educational program.

s/Ted A. Carlson  
Conference Chairman

s/Fred Landenberger  
Secretary-Manager"

#### CALIFORNIA DEPARTMENT OF AGRICULTURE HONORS FORESTRY

Forestry and cooperation were highlighted at a regular staff meeting at the State Department of Agriculture on June 11, commemorating the 100th anniversary of the U. S. Department of Agriculture.

Deputy Director of Agriculture W. J. Kuhrt briefly cited agricultural progress over the 100 years since President Abraham Lincoln created the United States Department of Agriculture on May 15, 1862. He told the audience that today each farmer produces enough food and fiber for 26 people, while only a century ago a farmer would do well to supply the needs of five. Kuhrt attributed this remarkable progress to the "highest type of cooperation" between the farmers, land grant colleges and universities, and agricultural departments at State and National level.

Since the many varied activities of the U. S. Department of Agriculture couldn't be covered during a single meeting, the U. S. Forest Service, the Pacific Southwest Forest and Range Experiment Station, and the Institute of Forest Genetics at Placerville were singled out as examples of the Departments important contribution to human welfare.

State Forester Francis Raymond introduced Assistant Regional Forester Grant Morse, who briefly told of the work of his agency. DeWitt Nelson, Director of the Department of Conservation introduced Kieth Arnold, Director of the Station to the combined group of employees and guests of the State Department of Agriculture. Arnold, in turn, introduced staff members of the Institute of Forest Genetics and described their valuable contribution to "forestry of the future". In comparing forest tree breeding to similar activity in annual crops, Arnold said, "There is every indication that breeding forest trees for superior qualities will make at least as much progress in the next century as has been made in corn and other crops during the past".

The standing room only audience of about 200 viewed a film, "A Tree is Born", showing forest geneticists at work from selecting superior parent trees to collecting and storing pollen, breeding parent stock, processing seeds, and care until outplanting of the resultant hybrids.



ADDRESS GIVEN TO FOREST FIRE TRUCK DRIVER CLASS #23 by JAMES DULITZ, STATE  
FOREST RANGER, SAN LUIS OBISPO RANGER UNIT

Members of the graduating class, ladies and gentlemen:

It is indeed a great privilege and my pleasure to be with you this afternoon and address the graduating class of the Central Sierra Training Center. On behalf of the State Forester, I wish to extend to all of you, our congratulations in successfully completing your assignment here. I have been informed that your class is one of the outstanding ones to graduate since the Center was started several years ago. To me, this points out the fact that you all are aware that it is a privilege for you to have the opportunity to receive this formal training.

Before the training centers were put into operation, it was necessary for all of us to acquire our knowledge and skills by on-the-job experiences, on-the-job training, and self instruction. The operation of the Training Centers have definitely proven to be an asset to the Division, as well as the individuals that have attended the school.

The profession which you have selected as your career, is certainly an honorable one. It entails the protection of our Natural Resources and life and property. This is a very serious charge for us to fulfill. It is people that cause the major portion of our problems. You have heard many times that nine out of ten forest fires are man caused. It is estimated that California's population will increase 37% during the 1960's and will become the most populace state in the union by next year. I make this statement to point out the fact that our job will become increasingly complex as our State population increases and that our challenges will become greater year by year, as the use of our wildland areas grows. This is a great challenge which each and every one of us must meet.

I would like to pass on to you a thought that was given to me some 25 years ago, by Mr. James K. Mace, who is now our Deputy State Forester in Southern California. Mr. Mace's comment to me at that time was, "In our work we will encounter problems and situations that may appear to us such as high mountains, too high and too steep to climb. But these mountains can be climbed if we are determined to do so. Once we have conquered one, the next mountain will appear to us as a hill, and much easier to climb. If we should choose to take the easy route by going around the bottom or over the lower passes, our problems and challenges will continue to appear to us as insurmountable, rather than like smaller hills or level plains."

The position of Forest Fire Truck Driver can be considered as the starting level for a career Forestry employee with the California Division of Forestry. There are great opportunities for all of us to further our positions in the profession, but these opportunities will not be handed to us on a silver platter. They are available to those of us who are not afraid of hard work and are willing to learn. Our training and experience should continue on a day to day basis, and we all must keep an open mind to gather new ideas and pick up new techniques. You can learn a great deal by observing from your fellow employee who has gained more experience than you by virtue of his tenure on the job.



I feel more confident that you will find these men willing to lend you a helping hand if you will demonstrate to them, your sincere interest and willingness, to learn.

We are the ground troops of our fire control operation, and at all times we must continue our efforts to hit fires hard and fast in an effort to keep them small. We cannot wait for the Bulldozer or the Air-tankers to arrive, as they are only two of the efficient tools that we have to work with. We all must do our part to make the total operation effective.

You are now a leader and supervisor of your fire control crew. The production of your men will be reflected in your ability to train them and lead them. The Division is always seeking good capable employees. I am sure that you are acquainted with people whose primary interests are, "How much pay do I receive." "What are the working conditions?" and "How many and how long are the coffee breaks?" This is not the type of employee the Division, or any other employer, is seeking. If I may borrow a phrase used by our President. "The good employee asks not 'What the Division can do for me' but will ask 'What can I do for the Division'." From the records of your individual accomplishments, you have all proven yourselves to fall into the category of employee that the Division is seeking.

Again I wish to express our congratulations to you. The best of luck to each and every one of you for this coming fireseason and to you in your careers with the California Division of Forestry.

SPEECH GIVEN BY DALE BASTON, VALEDICTORIAN OF FIRE TRUCK DRIVERS CLASS #23

Ladies and Gentlemen, Honored Guests, Mr. Banks, and the Training Center Staff, Fellow Students of Class #23 -

The 1956 Fire Plan was approved to set up various Training Centers throughout the State.

In 1957 there were two Training Centers set up - one for Northern California and one in Southern California for the purpose of training California Division of Forestry Personnel.

One of the groups to go through these Training Centers, as you already know, is the Forest Fire Truck Driver.

(1) The new Forest Fire Truck Driver must be trained in the basic skills and techniques of fire prevention and suppression prior to their field appointments.

(2) The men who have been working in the field are selected to increase their knowledge and further their value to the Division.

The Training Center was and had to be run on an academy type basis to be able to cover all the material that was to be given in only 5 weeks. The course requires 500 hours but had to be given in 200 hours. This kept most of us up til midnight various nights of the week and working on week ends to catch up our notebooks. Actually most of the courses given you could take for five weeks and not completely cover.



Some are:

Covering about 50 subjects and 10 extra subjects in the classroom and the field.

I think the main point to know and remember is when you all go back to your various counties and jobs, remember what you have learned here and use your notebooks as your right hand. It will help you when training firefighters and in reviewing your job, responsibilities, and duties.

If what has been learned here is put into action, not only the Division, but you will benefit tremendously.

In conclusion and on behalf of the class I would like to thank Ranger Dave German and his staff for the cooperation they gave us the last 5 weeks, and Mr. Banks and the Training Center staff for the knowledge and help they gave to each one of us.

Thank you.

#### PLACER RANGER UNIT

Even though fire season was here and the fire bug was loose, Placer County took time to give Joseph L. Quinlan, Assistant State Forest Ranger, a send off party on June 21, 1962. Joe Quinlan's last working day was June 19 and he is now on vacation until the end of July. Joe's new address will be Fallon, Nevada. Placer County employees and their spouses gathered at the Auburn Station at 7 P.M. (each station was manned). Assistant Ranger Frank Jenkins was in charge of the supper arrangements. Three barbecues were set up outside the kitchen and those hamburgers tasted good. The wives furnished salads and all the trimmings. During the party the Auburn Station had three fire runs. A couple of foremen and drivers never did get to enjoy their hamburgers. Joe Quinlan was presented with an ice chest to keep his drinks cool while he sits in the sun. For once, Joe was at a loss for words. The party moved to Ranger Brock's patio and ended at an early hour.

W. F. Brock  
State Forest Ranger

#### KIDNAPPING IN THE EL DORADO RANGER UNIT

In the dead of night a strange car pulled into the parking lot at the El Dorado Fire Station, silently the occupant slid from behind the wheel and moved toward the black and white car with the Highway Patrol emblem on it's door.

The stranger jerked open the door and grappled with the officer sitting behind the wheel. After a short struggle the unknown stranger subdued the Officer and carried the stiffened Officer's body to his own vehicle and sped away into the night.

To understand this drama that recently unfolded in the dead of night we first must remove some of the "polish" in the above paragraph.



Harvey West of the Placerville Lumber Company decided to do something about the numerous bad accidents that occur along US 50 from the County line to Lake Tahoe. His idea was to paint late model cars and mark them with the same features as the units used by the California Highway Patrol and place them along US 50 at strategic locations with the idea that the motoring public upon seeing one of these "silent patrol" cars would instinctively slow down.

With the blessing of the Commissioner of the Patrol, Mr. West went ahead as planned and acquired several cars and manikin officers at his own expense and re-painted the cars to match the real ones used by the Patrol.

The El Dorado Forest Fire Station, with CDF and local Patrol Headquarters permission, was selected as a location for one of the "silent units".

For the first several weeks all went well, in fact, the personnel at this station noted that the car actually did slow traffic considerably.

It might be well to mention at this point that several amusing events have taken place because of the car.

One fellow drove into the station, drove along side of the car and before he realized his mistake said, "Officer, how is the road to the Lake?"

A few days later a car pulled into the station with much screeching of brakes and tires, came to an abrupt halt near the car, the driver shouted out the window, "Officer there's an accident down the road three miles."

Well back to the original story - we haven't heard from "Silent Joe" since that dark night, but he since has been replaced by "Silent Pete."

The moral of this little story is: "If you are traveling along US 50 in El Dorado County, be careful and drive safely and obey the motoring laws, because the "Holstein" car parked along side of the road could be the "silent patrol" or then again\_\_\_\_\_ maybe the real thing! ! !

E. C. Berger  
Assistant State Forest Ranger

#### RESCUE, IOWA HILL, SHIRTTAIL CANYON, PLACER COUNTY

Reference is made to the rescue operations which involved one of our crews on Sunday, July 1, 1962 in the Shirttail Canyon area, Placer County.

Assistant Superintendent James G. Dougherty arrived at Iowa Hill with Lieutenant Rogers behind Foreman D. Campbell and Crew #1 with sixteen inmates at approximately 2300 hours.

There we met with Assistant State Forest Ranger Frank Jenkins, Game Wardens Jim White, Roy Neilson and several deputies from the Placer County Sheriffs Office.

I proceeded with the Game Wardens, the injured youth's father and the fishing partner of the injured youth into the canyon ahead of the Doctor. There was some doubt that the youth would be located at once, therefore, it



appeared best to hold the crew on top of the hill until the youth was located and a route out of the canyon was established.

The Doctor arrived in the canyon and examined the youth at about 0030 hours Monday. At this time I contacted Foreman Campbell and advised him to start the crew in, cutting a trail wide enough to accept the litter.

The crew arrived at the bottom of the canyon at about 0230 hours. The youth was secured to the litter and the crew started out at approximately 0300 hours, arriving at the top at 0630 hours.

The youth was then transferred to a Sheriff's Office station wagon and transported to the Highland General Hospital.

The crew, Foreman D. Campbell, Lieutenant Rogers and myself proceeded to La Bontes Restaurant for breakfast then returned to camp, arriving at 0900.

The operation went off as smoothly as could be expected under the adverse conditions that existed.

The Iron Mine Crew under the supervision of Foreman D. Campbell did an exceptionally good job throughout. They displayed initiative, teamwork and good judgement under extremely difficult working conditions.

The Sheriff's Office personnel, parents of the youth and many locals expressed their sincere appreciation and thanks to our crew for doing an outstanding job.

s/James G. Dougherty  
Assistant Forestry Superintendent

#### TRAINEES IN DISTRICT III

During the latter part of June, we received two college graduates from the School of Forestry in both Humboldt and Oregon State University to serve as Forestry Trainees in District III.

Mr. Thomas Appel is a graduate of Oregon State University, class of 1959. Mr. Appel has worked in forest industries since his graduation prior to coming with us. He is 25 years of age, married, has one child, is presently living in Rancho Cordova, and his home is in Auburn, California. During his school career, he served one season as a Firefighter in Placer County in 1957.

Mr. Gary Harlow, is a graduate of Humboldt State College, class of 1962. He is from San Diego County where during the summer season he served as Forest Firefighter for four seasons. He also served one season as a log scaler on the Jackson State Forest. Gary is 22 years of age, single, and makes his home presently in Sacramento.

We welcome these two men to our ranks.

s/D. E. Knowlton  
Assistant Deputy State Forester



#### DISTRICT IV

In the early part of May, the Squaw Valley Assistant Ranger District burned four miles of chemically pre-treated roadside along the lower Sand Creek Road.

The burning was done on both sides of the road, totaling approximately 253,440 square feet, with a total cost of \$151.00 equipment use to the Division and 72 man hours expended.

The chemicals were applied by the Tulare County Department of Public Works, under the direction of Road Commissioner, Joe Garcia, in a joint effort to curb roadside fires by burning in the early part of the fire season.

s/Edgar G. Young  
Assistant State Forest Ranger



